

ABSTRACT OF THE DISCLOSURE

A synchronization establishing method of a mobile station in a mobile communication system is proposed
5 which can reduce the effect of noise or interference, and achieve higher accuracy than conventional method. To enable the mobile station to detect a signal transmitted from a base station, and to establish synchronization to the signal in a mobile
10 communication system in which a synchronization channel is multiplexed periodically into the downlink signal, the mobile station averages, in phase and in complex numbers, correlation values of the synchronization channel over a plurality of periods,
15 followed by detecting the power of them to carrying out peak detection.